



## **DEPARTMENT OF COMMERCE**

### **National Oceanic and Atmospheric Administration**

**RIN 0648-XC124**

#### **Taking Marine Mammals Incidental to the Hampton Roads Bridge Tunnel Expansion Project in Norfolk, Virginia**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of issuance of modified letters of authorization.

**SUMMARY:** On January 28, 2022, NMFS received a request from the Hampton Roads Connector Partners (HRCP) to modify Letters of Authorization (LOA) that were issued to HRCP on April 2, 2021, as part of incidental take regulations. These regulations govern the unintentional taking of marine mammals incidental to construction activities associated with the Hampton Roads Bridge Tunnel Expansion Project (HRBT) in Norfolk, Virginia, over the course of 5 years (2021-2026). The modification is due to design updates which decrease the number of piles installed, require fewer hours of pile installation, and reduce the number of pile driving days. Prescribed mitigation measures were modified to reflect the change in design. We have determined that the modification will not result in an increase in take that would exceed the limits authorized under the original LOA. Therefore, the total amount of authorized taking remains the same.

**DATES:** This modified LOA is effective through April 1, 2026.

**FOR FURTHER INFORMATION CONTACT:** Robert Pauline, Office of Protected Resources, NMFS, (301) 427-8401. Electronic copies of the application and supporting documents, as well as the issued modified LOA, may be obtained online at:

*<https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine->*

*mammal-protection-act*. In case of problems accessing these documents, please call the contact listed above.

## **SUPPLEMENTARY INFORMATION:**

### **Background**

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 *et seq.*) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth.

NMFS has defined “negligible impact” in 50 CFR 216.103 as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Except with respect to certain activities not pertinent here, the MMPA defines “harassment” as: Any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

### **Summary of Request and Analysis**

On November 19, 2019, NMFS received an application from HRCP requesting authorization for take of marine mammals incidental to construction activities related to a major road transport infrastructure project along the existing I-64 highway in Virginia, consisting of roadway improvements, trestle bridges, and bored tunnels crossing Hampton Roads between Norfolk and Hampton. On October 7, 2020 (85 FR 63256), NMFS published a notice of receipt (NOR) of HRCP's application in the **Federal Register**, requesting comments and information related to the request. The proposed rule was subsequently published in the **Federal Register** on January 8, 2021 (86 FR 1588) and requested comments and information from the public. A final rule and associated regulations were published in the **Federal Register** on April 2, 2021 (86 FR 17458; 50 C.F.R. Part 217, Subpart W – Taking And Importing Marine Mammals Incidental to Hampton Roads Connector Partners Construction at Norfolk, Virginia).

On January 28, 2022, HRCP notified NMFS of their request for modification of the LOA. Following receipt of the original LOA, HRCP has implemented and adhered to the prescribed suite of mitigation and monitoring measures which provide the means of effecting the least practicable adverse impact on the affected species or stocks and their habitat.

Preliminary designs for South Island included the installation of numerous 24-inch and 30-inch steel pipe piles as Settlement Reduction and Deep Foundation piles to support the island expansion and tunnel approach structure. It was anticipated that these piles would be driven in open water prior to filling for island creation. However, during design optimization, the contractor has opted to advance a design alternative utilizing a filled cofferdam. The construction activities will include permanent installation of the cofferdam walls in open water. The cofferdam walls, and associated splash walls, will be constructed with a combination of steel sheet and steel pipe piles up to 60-inches in size.

The modification eliminated the following piles from the existing design plan:

- 50, 30-inch steel pipe, concrete-filled Deep Foundation piles;
- 394, 24-inch steel pipe Settlement Reduction piles; and
- 448 panels of sheet piles from the South Island Expansion.

Instead, HRCP plans to install the following in-water piles:

- 100 sheet pile panels at the South Island Expansion Cofferdam;
- 21, 40-inch steel piles at the South Island Expansion Cofferdam;
- 250, steel pipe piles 52-inches to 60-inches in size at the South Island Expansion Splash/Sea Wall and Cofferdam; and
- 12, 24-inch concrete square permanent piles at the South Island Trestle Abutment.

The change in design plan requires the establishment and monitoring of appropriate shutdown zones and harassment zones for the new piles, which have been included in the modified LOA. Additionally, the shutdown zones and harassment zones related to the eliminated piles were removed from the modified LOA. These changes are illustrated in Tables 1 and 2 below.

The revised action associated with the modified LOA entails fewer pile installations/removals with less total hours of driving time over fewer active driving days. Therefore, it is reasonable to predict that take of marine mammals would be fewer than were considered in our analysis conducted for the rule.

The modification to the LOA is expected to decrease takes by Level A and Level B harassment by reducing both the duration and intensity of marine mammals' exposure to in-water sound at levels that could result in injury or behavioral impacts.

Specifically, the Level B harassment zones associated with the installation of new piles and sheets are smaller than or equivalent to those of the piles being eliminated, as illustrated in Table 1 below. The modification would result in harassment zones that are smaller or equivalent to those in the original LOA, and fewer days of activity with the potential to cause harassment, which, together, would be expected to result in a reduction

in the number of takes by Level B harassment. However, HRCP did not request and NMFS has not authorized any changes to the take numbers contained in the original LOA as a conservative measure to ensure that take limits are not exceeded.

**Table 1. Changes to Modified LOA Level B Harassment Zones for Different Pile Sizes and Types and Methods of Installation with No Attenuation**

Modification Action	Construction Component	Pile Type	Level B Isopleth (m), Unattenuated	# Days
Vibratory Hammer – South Island				
Eliminated	Deep Foundation Piles	30-in steel piles, concrete filled	13,594	9
Eliminated	Settlement Reduction Piles	24-in steel piles	5,412	66
DTH Pile Installation – South Island				
Eliminated	Deep Foundation Piles	30-in steel piles, concrete filled	11,659	9
Impact Hammer – North Trestle				
Included	Cofferdam	52- to 60-inch steel piles	2,154	13
Included	Cofferdam	40-inch steel piles	3,981	21
Included	Trestle Abutment	24-inch concrete square piles	117	12

**Table 2. Changes to Modified LOA Shutdown Zones with Attenuation and With No Attenuation for All Authorized Species**

Modification Action	Method	Pile Size/Type	Strikes/pile	# piles installed or removed/day	Cetaceans - Shutdown Zones (m)			Pinnipeds - Shutdown Zones (m)	# Days
					LF	MF	HF		
No Attenuation									
Eliminated	Down-the-Hole Installation	30-in Pipe, Steel, concrete filled	36,000 strikes	6	1,950	70	100	15/35	9
Included	Impact Installation	40-inch Pipe, Steel	200 strikes	3	1,320	50	100	15/35	2
Included		52- to 60-inch Pipe, Steel	200 strikes	3	970	35	100	15/35	13
With Attenuation									
Eliminated	Impact Installation	30-in Pipe, Steel, concrete filled	20 strikes	6	135	10	50	25	85
Included		40-inch Pipe, Steel	200 strikes	3	450	20	100	25	5
Included		52- to 60-inch Pipe, Steel	200 strikes	3	330	20	100	25	71

While the new Level A harassment zones associated with impact driving under the modified LOA (Table 2) are larger in some instances than the injury zones that were established under the original LOA, there are significantly fewer days of in-water installation planned for the modification (91 days) compared to the original LOA (151 days). Therefore, take of marine mammals by Level A harassment would be expected to be reduced. Additionally, HRCP plans to eliminate installation of 50 30-inch steel pipe, concrete-filled piles that were planned to be installed using down-the-hole (DTH) methods. As shown above, these piles have the largest Level A harassment zones of any of the piles that would have been driven under the original LOA. Elimination of these DTH installations in the original LOA also supports a conclusion that, overall, expected Level A harassment events will be reduced under the modified LOA.

Of note, marine mammal monitoring during in-water construction up to January 2022 has recorded two potential takes by Level A harassment since the start of LOA construction in July 2021. HRCP was authorized 3,359 Level A harassment takes split between the 5 years of the LOA and five authorized species. The modifications to the mitigation and monitoring requirements, which include establishing new shutdown and harassment zones for 40-inch steel piles and 52- to 60-inch pipe piles, create a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring, pursuant to the adaptive management provisions set forth in the preamble in the final rule (see “Mitigation” and “Monitoring and Reporting” sections of the final rule (86 FR 17458; April 2, 2021), for a detailed description of the mitigation and monitoring measures and the goals of the measures).

In summary, the modifications would result in a decrease in the total number of active hours of installation/removal by 855 hours and a decrease in the total number of days of in-water installation/removal by 60 days at South Island. The number of sheet piles required would decrease from 448 to 100, while the number of steel pipe piles

would decrease from 901 to 271. Given these modifications and the associated decreases in hours and days of installation/removal and number of piles, as well as the reduced impacts and resulting take, all of which fall within the scope of the rule, we have determined that the modified shutdown zones have a reasonable likelihood of more effectively reducing potential adverse impacts to marine mammals and would provide the means of effecting the least practicable adverse impact on the affected species or stocks and their habitat.

The described modification of the LOA does not alter the original scope of activity analyzed or the impact analysis in a manner that materially affects the basis for the original findings under the final rule, both annually and over the 5 year period of effectiveness. Accordingly, we have determined that the take authorized in this LOA will have a negligible impact on the affected species or stocks and, separately, that the take will be of small numbers.

#### **Authorization**

NMFS has issued a modified LOA to HRCF authorizing the take of marine mammals for the reasons described above, for the potential harassment of small numbers of marine mammals incidental to construction activities associated with the Hampton Roads Bridge Tunnel Expansion Project provided the mitigation, monitoring and reporting requirements of the rulemaking are incorporated.

Dated: July 22, 2022.

**Shannon Bettridge,**

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*National Marine Fisheries Service.*